

# **SCARIFYING AND COMPACTING ROADBED - Section 306**

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This section is designed for use when an existing road is being incorporated into new construction under traffic. The existing road must be prepared for reconstruction as a raw subbase or base course.

## **MATERIALS**

Materials will be those in the existing roadbed.

## **EQUIPMENT**

The engineer will approve equipment prior to use. Equipment shall be capable of scarifying and blending the full width of the roadway to a minimum depth of six inches or plan depth. All teeth on the scarifier shall be in place and adequate to break up the existing roadbed into a uniform, compactable material.

## **CONSTRUCTION DETAILS**

**The contractor shall not scarify more than a mile of material in advance of compaction.** The contractor is to be aware of predicted weather and changing weather patterns and schedule operations to minimize the chance of getting pulverized and underlying materials wet. Damage to the roadway or materials prior to compaction shall be corrected at no direct pay.

It shall be the responsibility of the contractor to coordinate operations with the project engineer and the district laboratory engineer to obtain information needed for density testing in accordance with DOTD TR 415 or TR 418 and DOTD TR 401.

The scarified material shall be blended across the roadway to form a uniform mixture. Pieces of roadbed that cannot be adequately broken and blended shall be removed. The scarified and compacted roadbed shall be finished to a uniform, smooth, tightly-knit surface. There shall be no undulations between stations. A prime coat shall be applied in accordance with Specification Section 505.

## **QUALITY ASSURANCE**

### **QUALITY CONTROL (QC)**

The contractor shall check the depth of the scarification to ensure that the minimum specification depth of six inches or plan depth is being met. The contractor shall check that the material is uniformly blended and compacted to the specification requirements. If density is not achieved, the contractor shall continue the compaction process or

reconstruct until density is met. The contractor is to check the surface for smoothness and conformance to grade and cross slope.

## **INSPECTION AND ACCEPTANCE**

Project personnel will obtain a sample of the blended, pulverized material after it has been mixed uniformly across the roadway for determination of maximum dry density and optimum moisture in accordance with DOTD TR 415 or 418.

Following compaction by the contractor, project personnel will determine the percent compaction in accordance with DOTD TR 401 using the maximum dry density. If density is not met, reconstruction will be required.

<b>TYPE</b>	<b>% OF MAXIMUM DENSITY, Min.</b>
Base	100.0 %
Subbase	95.0 %

### **SPECIFICATION DENSITY REQUIREMENTS FOR BASE AND SUBBASE**

## **VISUAL INSPECTION**

Project personnel will inspect the surface of the finished base or subbase for conformity to specifications and plans. The contractor will be required to correct any deficiencies caused to the scarified roadbed prior to compaction, loose materials, soft spots, irregular surface or other deviations.

## **QUALITY ASSURANCE DOCUMENTATION**

Documentation will follow the general requirements of Class II base course, Section 302, since the processing and compaction are parallel to the construction of a base course.

## **QUALITY CONTROL**

The contractor shall maintain documentation of the QC program as directed by the project engineer. A copy of the documentation of QC tests and results shall be given to department personnel as noted on page 5.

## **INSPECTION AND ACCEPTANCE**

Department personnel will maintain documentation of inspection, acceptance tests, and construction progress in a field book, the appropriate MATT forms, or other documents in accordance with standard department procedures.

### **Density & Moisture Content Worksheet**

The test procedure DOTD TR 401 - The Determination of In-Place Density, contains a worksheet to be used to facilitate the calculations associated with the determination of density, moisture, and pulverization. This worksheet is to be completed in conjunction with this procedure and used for these calculations. Department personnel will submit this form for acceptance testing regularly to the district laboratory for MATT system entry. The district laboratory will return the original to the project engineer for inclusion in the 2059 Review.

## **MAINTENANCE**

The contractor shall be responsible for the completed, compacted roadbed. It shall be protected from damage from public or construction traffic or construction operations. The contractor shall maintain the compacted roadbed in the condition in which it was accepted until the next lift is placed. The contractor shall make any necessary repairs, including patching or reconstruction, and reapplication of the asphaltic prime coat. All correction of deficiencies shall be completed prior to the placement of the subsequent lift over the base course.